

CLAIMS

1. Method for checking the retention of an organic compound (i) or a plurality of organic compounds (i) within a liquid or solid phase, 5 characterized in that it comprises a step in which the oxidoreduction potential of said solid or liquid phase is modified by contacting said solid or liquid phase with an oxidizing agent, a reducing agent or a neutral agent, the oxidoreduction potential value of said solid or liquid phase determining the retention degree of the organic compound (i) or each of the organic 10 compounds (i) within said liquid or solid phase.
2. Method according to claim 1, wherein the liquid or solid phase constitutes a first phase having at least one common contact surface with a second phase, the second phase being a gas phase or a liquid phase, said method being characterized in that the oxidoreduction potential value of 15 said first liquid or solid phase determines the value of the mass sharing coefficient (Ki) of the organic compound (i) or each of the organic compounds (i) between said first phase and said second phase.
3. Method according to claim 1, characterized in that the first and second phase types are respectively selected amongst:
  - 20 - a first hydrophilic liquid phase and a second gas phase;
  - a first hydrophobic liquid phase and a second gas phase;
  - a first hydrophilic liquid phase and a second hydrophobic liquid phase;
  - a first hydrophobic liquid phase and a second hydrophilic 25 liquid phase; and
  - a first solid phase and a second gas phase.
4. Method according to any of claims 1 to 3, characterized in that the oxidizing agent, the reducing agent or the neutral agent is respectively an oxidizing gas, a reducing gas or a neutral gas.
- 30 5. Method according to claim 4, characterized in that the oxidizing gas is oxygen or an oxygen-containing gas.
6. Method according to claim 4, characterized in that the reducing gas is hydrogen or a hydrogen-containing gas.

7. Method according to claim 4, characterized in that the neutral gas is carbon dioxide, nitrogen, helium, nitrogen protoxide or a gas containing carbon dioxide, helium or nitrogen protoxide, and the mixtures thereof.
8. Method according to any of claims 1 to 3, characterized in that the oxidizing agent, the reducing agent or the neutral agent is a respectively an oxidizing or reducing organic or mineral solid compound.
9. Method according to claim 8, characterized in that the oxidizing solid compound is selected amongst molecules such as iron, copper, hydrogen peroxide or potassium ferricyanide.
10. Method according to claim 8, characterized in that the reducing solid compound is selected amongst reducing or anti-oxidizing molecules of natural or synthetic origin such as glutathion, cystein, mercaptoethanol, dithiothreitol, ascorbic acid and tocopherol.
11. Method according to any of claims 1 to 10, characterized in that the organic compound (i) is an aroma.
12. Method according to claim 11, characterized in that the aroma is selected amongst 2-nonenone, diacetyl, allyl isothiocyanate, oct-1-en-3-ol, ethyl hexanoate, benzaldehyde, hexanal, carveol, citral, limonene,  $\alpha$ -pinene,  $\beta$ -pinene or a mixture thereof.
13. Application of the method according to any of claims 1 to 12 to the preservation of the aromatic properties of a food composition.
14. Application according to claim 13, characterized in that the food composition is a solid food composition.
15. Application according to claim 13, characterized in that the food composition is a liquid food composition.
16. Method for preserving the aromatic properties of a food composition, characterized in that it comprises a step (i) of modifying the oxidoreduction potential of said food composition by addition of an oxidizing agent, a reducing agent or a neutral agent.
17. Application of the method according to any of claims 1 to 10 to the extraction of organic compounds contained in a starting product.